



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,388	10/31/2000	Douglas W. Arens	10002571-1	2871

22879 7590 05/26/2004

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

TRAN, PHILIP B

ART UNIT	PAPER NUMBER
----------	--------------

2155

DATE MAILED: 05/26/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,388

Applicant(s)

ARENS, DOUGLAS W.

Examiner

Philip B Tran

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, line 2, the limitation "the first device modifies the configuration information of the second device to create configuration information for itself" should be rephrased as "the first device modifies the configuration information of the second device **received from the second device** to create configuration information for itself" in order to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 8-12, 14-17, 19-20 and 24-25 are rejected under 35 U.S.C 102(e) as being anticipated by Li et al (Hereafter, Li), U.S. Pat. No. 6,012,088.

Regarding claim 1, Li teaches a network configuration (= configuring a computing system for communication with a communications network) [see Abstract and Col. 1, Lines 14-17] comprising:

a first device that is unconfigured (= a not yet configured internet access device) [see Abstract and Col. 9, Lines 20-24] and connected to the network (= internet access device (100) connects to the internet) [see Abstract and Col. 9, Lines 13-17]; and

a second device that is configured and connected to the network (= a configuration server (410) connects to the internet) [see Abstract and Figs. 8 & 9], wherein the second device sends over the network at least a portion of its configuration information, wherein the at least a portion of the configuration information of the second device is used to create configuration information for the first device (= downloading a unique configuration record from the configuration server (410) and then the internet access device (100) configuring itself for communication with the internet using the configuration record) [see Abstract and Col. 12, Lines 43-48].

Regarding claim 2, Li further teaches the first device modifies the configuration information of the second device to create configuration information for itself (= downloading a unique configuration record from the configuration server (410) and then the internet access device (100) configuring itself for communication with the internet using the configuration record [see Abstract and Col. 12, Lines 43-48] and displaying

and error message or terminating the call procedure [see Col. 12, Lines 62-65 and Col. 13, Lines 50-59] which will change the configuration).

Regarding claim 3, Li further teaches the first device is capable of sending over the network a request for configuration information (= the internet access device (100) requests a unique configuration record) [see Col. 12, Lines 43-48 and Col. 22, Lines 60-63].

Regarding claim 4, Li further teaches the second device sends its configuration information in response to the request for configuration information from the first device (= downloading configuration record from the configuration server (410) to the internet access device (100)) [see Col. 12, lines 43-48 and Col. 22, Lines 64-65].

Regarding claim 5, Li further teaches the configuration information for the first device is address configuration information (= the configuration record contains information such as addresses) [see Col. 14, lines 53-65].

Regarding claim 6, Li further teaches the configuration information created for the first device is the IP address of the first device (= the configuration record contains information such as IP addresses) [see Col. 14, Lines 53-65].

Regarding claim 8, Li further the configuration information create for the first device is created by the first device modifying the at least a portion of the configuration information of the second device (= downloading a unique configuration record from the configuration server (410) and then the internet access device (100) configuring itself for communication with the internet using the configuration record [see Abstract and Col. 12, Lines 43-48] and displaying an error message or terminating the call procedure [see Col. 12, Lines 62-65 and Col. 13, Lines 50-59] which will change the configuration).

Regarding claim 9, Li teaches a computer-implemented method of transferring network information, including configuration information, between at least a first and second device connected to the network (= configuring a computing system for communication with a communications network including downloading configuration information from a configuration server to an internet access device) [see Abstract and Col. 1, Lines 14-17], including the steps of:

sending from the second device that is connected to and configured for the network at least a portion of its configuration information (= a configuration server (410) connects to the internet [see Abstract and Figs. 8 & 9] and downloading a unique configuration record from the configuration server (410) to the internet access device) [see Col. 12, Lines 43-48]; and

using the at least a portion of the configuration information sent from the second device to create configuration information for the first device (= the internet access device (100) configuring itself for communication with the internet using the

configuration record) [see Abstract and Col. 12, Lines 43-48], wherein the first device is connected to the network (= internet access device (100) connects to the internet) [see Abstract and Col. 9, Lines 13-17] and initially unconfigured (= a not yet configured internet access device) [see Abstract and Col. 9, Lines 20-24].

Regarding claim 10, Li teaches the step of sending from the first device a request on the network for configuration information (= the internet access device (100) requests a unique configuration record) [see Col. 12, Lines 43-48 and Col. 22, Lines 60-63].

Regarding claim 11, Li further teaches the second device responds to the request from the first device for configuration information with at least a portion of its configuration information (= downloading configuration record from the configuration server (410) to the internet access device (100)) [see Col. 12, lines 43-48 and Col. 22, Lines 64-65].

Regarding claim 12, Li further teaches the step of determining whether to accept the at least of portion of the configuration information from the second device (= determining whether to download configuration record from the configuration server if the configuration record exists) [see Fig. 11B].

Regarding claim 14, Li further teaches generating a subnet mask from the at least a portion of configuration information of the second device (= configuration record

includes configuration information related to IP network such as IP network address and an IP network mask) [see Col. 15, Lines 55-58].

Regarding claim 15, Li further teaches after the first device is configured, the second device may respond to the first device with network information other than configuration information (= once configured, the internet access device acts as a router, communicating with the internet using a static IP address and a range of IP addresses for other devices on a network [see Col. 3, Lines 57-61] and the mail, web, time and other additional server are enabled with confirmation [see Col. 16, 57-59].

Regarding claim 16, Li further teaches the second device responds both with at least a portion of its configuration information and other network information (= downloading configuration record from the configuration server (410) to the internet access device (100) [see Col. 12, Lines 43-48 and Col. 22, Lines 64-65] wherein the configuration record contains information such as IP addresses and other network information [see Col. 14, Lines 53-65]).

Regarding claim 17, Li further teaches the step of the second device responding with the network information other than configuration information (= downloading configuration record from the configuration server (410) to the internet access device (100) [see Col. 12, Lines 43-48 and Col. 22, Lines 64-65] wherein the configuration

record contains information such as IP addresses and other network information [see Col. 14, Lines 53-65]).

Regarding claim 19, Li further teaches communicating with second device or other devices on the network that the first device that was previously unconfigured is now configured and available for use (= a not yet configured internet access device(100) [see Abstract and Col. 9, Lines 20-24] connects to the internet [see Abstract and Col. 9, Lines 13-17] and downloads a unique configuration record from the configuration server (410) and then the internet access device (100) configures itself for communication with the internet using the configuration record [see Abstract and Col. 12, Lines 43-48]).

Regarding claim 20, Li further teaches the configuration information of the second device is used to create an IP address for the first device (= the configuration record contains information such as IP addresses) [see Col. 14, Lines 53-65].

Regarding claim 24, Li teaches a network configuration (= configuring a computing system for communication with a communications network) [see Abstract and Col. 1, Lines 14-17] comprising:

a first device that is unconfigured (= a not yet configured internet access device) [see Abstract and Col. 9, Lines 20-24] and connected to the network (= internet access device (100) connects to the internet) [see Abstract and Col. 9, Lines 13-17], the first

device being capable of sending over the network a request for configuration information (= the internet access device is able to automatically locate a configuration server and request a unique configuration record) [see Col. 12, Lines 43-48]; and

a second device that is configured and connected to the network (= a configuration server (410) connects to the internet) [see Abstract and Figs. 8 & 9], wherein responsive to the request for configuration information from the first device, the second device responds with at least a portion of its configuration information, wherein the at least a portion of the configuration information of the second device is used to create configuration information for the first device (= downloading a unique configuration record from the configuration server (410) and then the internet access device (100) configuring itself for communication with the internet using the configuration record) [see Abstract and Col. 12, Lines 43-48].

Regarding claim 25, Li teaches a computer-implemented method of transferring network information, including configuration information, between at least a first and second device connected to the network (= configuring a computing system for communication with a communications network including downloading configuration information from a configuration server to a n internet access device) [see Abstract and Col. 1, Lines 14-17], including the steps of:

sending from the first device, wherein the first device is unconfigured (= a not yet configured internet access device) [see Abstract and Col. 9, Lines 20-24], a request on the network for configuration information (= the internet access device is able to

automatically locate a configuration server and request a unique configuration record)
[see Col. 12, Lines 43-48];

wherein a second device configured for the network (= a configuration server (410) connects to the internet) [see Abstract and Figs. 8 & 9], responsive to the request on the network for configuration information, responds with at least a portion of its configuration information; and

using the at least a portion of the configuration information of the second device, to create configuration information for the first device (= downloading a unique configuration record from the configuration server (410) and then the internet access device (100) configuring itself for communication with the internet using the configuration record) [see Abstract and Col. 12, Lines 43-48].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 7 is rejected under 35 U.S.C 103(a) as being unpatentable over Li et al (Hereafter, Li), U.S. Pat. No. 6,012,088 in view of Sandick et al (Hereafter, Sandick), U.S. Pat. No. 6,684,241.

Regarding claim 7, Li does not explicitly teach the second device is not required to be a server. However, Li does not teach the second device must be a server either.

Sandick, in the same field of configuring a network device endeavor, discloses the second device is a router [see Sandick, Figs. 2-3 and Col. 4, Lines 5-26 and Col. 7, Lines 50-66]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of configuring a network device such as a router, disclosed by Sandick, into configuration for internet access device in a network as disclosed by Li, in order to provide a more versatile system in handling tasks of configuring and managing an increasing complexity of network with a variety of different devices.

7. Claim 13 is rejected under 35 U.S.C 103(a) as being unpatentable over Li et al (Hereafter, Li), U.S. Pat. No. 6,012,088 in view of Pham et al (Hereafter, Pham), U.S. Pat. No. 6,629,145.

Regarding claim 13, Li does not explicitly the step of determining whether configuration address information was received from a compatible device. However, Pham, in the same field of configuring network devices endeavor, discloses verifying if the IP address provided by the server (DHCP server) is compatible with the connected network [see Col. 2, Lines 33-39]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of verifying if the IP address provided by the server is compatible, disclosed by Pham, into the teaching of configuring network devices as disclosed by Li, in order to enable communications among different devices in the network computer system [see Col. 2, Lines 33-39].

8. Claim 18 is rejected under 35 U.S.C 103(a) as being unpatentable over Li et al (Hereafter, Li), U.S. Pat. No. 6,012,088 in view of Schmuelling et al (Hereafter, Schmuelling), U.S. Pat. No. 6,603,758.

Regarding claim 18, Li does not explicitly teach the other network information is SYSLOG information. However, Schmuelling, in the same field of internet access configuration, discloses SYSLOG system for logging informational or error messages [see Schmuelling, Col. 6, Lines 8-14]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the implementation of SYSLOG system, disclosed by Li, into the system of configuring and assigning IP address as disclosed by Li, in order to efficiently monitor and report error messages.

9. Claim 21 is rejected under 35 U.S.C 103(a) as being unpatentable over Li et al (Hereafter, Li), U.S. Pat. No. 6,012,088 in view of Schmuelling et al (Hereafter, Schmuelling), U.S. Pat. No. 6,603,758 and further in view of Alkhatib et al (Hereafter, Alkhatib), U.S. Pat. No. 6,532,217.

Regarding claim 21, Li and Schmuelling do not explicitly teach the step of confirming that the IP address created for the first device is not currently in use. However, Alkhatib, in the same field of configuring network address endeavor, discloses determining if the address has not already been taken [see Alkhatib, Fig. 3A and Col. 9, Lines 39-47]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teachings of verifying IP address, disclosed by Alkhatib, into the system of configuring and assigning IP address as disclosed by Li, in order to avoid the conflict of duplicated IP addresses in the network.

10. Claim 22 is rejected under 35 U.S.C 103(a) as being unpatentable over Li et al (Hereafter, Li), U.S. Pat. No. 6,012,088 in view of Alkhatib et al (Hereafter, Alkhatib), U.S. Pat. No. 6,532,217.

Regarding claim 22, Li does not explicitly teach the step of creating information for the first device includes the step of combining a portion of a configuration address information from the second device with a device portion address of the first device. However, Alkhatib, in the same field of configuring network address endeavor, discloses the chosen unique host number is combined with the subnet number to form the new node's network address [see Alkhatib, Abstract]. It would have been obvious to one of

ordinary skill in the art at the time of the invention was made to incorporate the teaching of combining the chosen unique host number with the subnet number, disclosed by Alkhatib, into the system of configuring and assigning IP address as disclosed by Li, in order to efficiently reconfigure the IP address and form a new IP address for the unconfigured internet access device when the device just connects to the network.

11. Claim 23 is rejected under 35 U.S.C 103(a) as being unpatentable over Li et al (Hereafter, Li), U.S. Pat. No. 6,012,088 in view of Ford et al (Hereafter, Ford), U.S. Pat. No. 6,687,755.

Regarding claim 23, Li does not explicitly teach the device portion address of the first device is generated using a hash algorithm. However, Ford, in the same field of configuring and assigning IP address endeavor, discloses the use of deterministic hashing algorithm to generate the host portion of the IP address [see Ford, Col. 8, Lines 54-59]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the implementation of generating the host portion of the IP address using a deterministic hashing algorithm, disclosed by Ford, into the system of configuring and assigning IP address as disclosed by Li, in order to result in less usage conflicts for generating IP addresses [see Ford, Col. 9, Lines 1-4] because using a deterministic hashing algorithm would have enabled the generation of random IP addresses.

Other References Cited

12. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Gitlin et al, U.S. Pat. No. 6,691,170, discloses assigning IP addresses to network devices.

B) Peters, U.S. Pat. No. 6,601,093, discloses IP address configuration.

C) Brewer et al, U.S. Pat. No. 5,918,016, discloses automating protocol assignment.

D) Hamilton, U.S. Pat. No. 5,852,722, discloses automatic configuration of home network computers.

E) Gai et al, U.S. Pat. No. 6,697,360, discloses auto-configuring network devices.

F) Althaus et al, U.S. Pat. No. 6,697,851, discloses selecting configuration information for a client in the distributed data processing system.

G) Mouko et al, U.S. Pat. No. 6,678,732, discloses dynamic host configuration protocol server for allocating IP addresses to a plurality of clients.

H) Woundy, U.S. Pat. No. 6,009,103, discloses automatic allocation of resources in a network.

13. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (703) 308-8767. The fax phone number for this Group is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached on (703) 308-6662.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Philip Tran
Philip Tran
Art Unit 2155
May 20, 2004